

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-6 (Canceled).

Claim 7 (New): A method for control of a motorization system including a diesel engine, an air-intake circuit, and an exhaust circuit for exhaust gas originating from the engine, the intake circuit including an adjusting mechanism for controlling flow of air entering the engine and the exhaust circuit including a nitrogen oxides trap for storage of nitrogen oxides contained in the exhaust gases, the method performing a regeneration mode to regenerate the nitrogen oxides trap by supplying reducing exhaust gases, the method comprising:

determining an index value of air flow corresponding to an operating point of the engine during the regeneration mode;

instructing the adjusting mechanism to obtain an air flow close to the index value; and
performing a primary and secondary injection of fuel, the secondary injection being performed during an expansion phase and operative to maintain the exhaust gases in the reducing state.

Claim 8 (New): A method according to claim 7, wherein the motorization system is provided with an accessory that generates a variable back-pressure in the exhaust circuit, and the air-flow index value is incremented together with the exhaust back-pressure.

Claim 9 (New): A method according to claim 8, wherein the accessory that generates a variable back-pressure is a particle filter, the air-flow index value being corrected by a

factor that is a function of the operating point and of the degree of loading of the particle filter.

Claim 10 (New): A method according to claim 9, wherein the degree of loading of the particle filter is evaluated by the exhaust-gas flow passing through it and by a pressure difference between the inlet and outlet.

Claim 11 (New): A method according to claim 9, wherein the degree of loading of the particle filter is evaluated by measuring pressure upstream from the particle filter relative to the exhaust-gas flow.

Claim 12 (New): A motorization system implementing a method for control of the motorization system, the motorization system comprising:

- a diesel engine;

- an air-intake circuit; and

- an exhaust circuit for exhaust gas originating from the engine, the intake circuit including an adjusting mechanism for controlling flow of air entering the engine and the exhaust circuit including a nitrogen oxides trap for storage of nitrogen oxides contained in the exhaust gases;

- the method performing a regeneration mode to regenerate the nitrogen oxides trap by supplying reducing exhaust gases, the method comprising:

 - determining an index value of air flow corresponding to an operating point of the engine during the regeneration mode;

 - instructing the adjusting mechanism to obtain an air flow close to the index value; and

performing a primary and secondary injection of fuel, the secondary injection being performed during an expansion phase and operative to maintain the exhaust gases in the reducing state.